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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,209

08/20/2003

James Arthur Fisher

TUC920030082US1

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06/19/2006

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EXAMINER

GANDHI, DIPAKKUMAR B

ART UNIT

PAPER NUMBER

2138

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/644,209	FISHER ET AL.	
	Examiner	Art Unit	
	Dipakkumar Gandhi	2138	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Applicants' request for reconsideration filed on 3/21/2006 has been reviewed.
2. Amendment filed on 3/21/2006 (including amended claims) has been entered.
3. The examiner has withdrawn the objection to the claims 8, 11 and 14.
4. Applicants' arguments filed 3/21/2006 have been fully considered but they are not persuasive.
5. The applicants contend, "As per claim 1, Taki et al. do not teach a) inserting a physical storage volume into an input area in a storage device; b) scanning an input area on said physical storage volume; c) moving said physical storage volume to a drive capable of testing storage media in said physical storage volume; and e) returning tested said physical storage volume to said input area."

The examiner disagrees and would like to point out that Taki et al. teach that in an information management system using magnetic tapes serving as recording media (hereinafter referred to as a tape library system), a great number of tape cassettes are placed in a rack, and a desired tape cassette is taken, as required, out of the rack by a transfer mechanism and it is loaded on a tape drive unit properly selected from a plurality of tape drive units thereby recording or reproducing information (col. 1, lines 26-33, Taki et al.).

Taki et al. also teach that FIG. 7 generally illustrates the construction of a tape library system

29. Tape cassettes (not shown) are placed, via a cassette supplying part 31 provided in the front panel 30a of the case 30, into a cassette storage rack 32, 32, . . . disposed along a vertical direction from the middle part in the case 30 toward both the upper and bottom locations in the case 30. There is an ejection part 33 at a location slightly lower than the tape cassette supplying part 31 so that a tape cassette can be taken outside via a proper chute. In drive cases 34, 34, . . . disposed below the cassette storage racks 32, 32, . . . , there are a plurality of tape drive units 35, 35, . . . , arranged side by side, corresponding to the recording/reproducing means 18, 18,... A transfer mechanism 36 is disposed at a location opposite to the cassette storage racks 32 and the drive cases 34 so that a desired tape cassette is taken from a particular cassette storage rack 32 and transferred to a desired tape drive unit 35 by the transfer mechanism 36. The transfer mechanism 36 is also used to return the tape cassette to the original location in the rack 32. The transfer mechanism 36 may be realized for example by a 3-

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dimensional orthogonal robot. The transfer mechanism 36 includes a hand block 37, and a moving mechanism for moving a cassette along a vertical shaft or a horizontal shaft (fig. 7, col. 9, line 66 to col. 10, line 21, Taki et al.).

Taki et al. teach that FIG. 9 is a cross-sectional view of the tape library system 29, taken along a horizontal plane near the cassette storage racks 32. As shown in FIG. 9, the transfer mechanism 36 includes: a supporting shaft 51 extending (vertically) in a direction perpendicular to the drawing sheet of FIG. 9; a movable table 52 which can be moved in the vertical direction along the supporting shaft 51; and a hand block 37 slidable along a guide rail 53 provided on the movable table 52 in a horizontal direction parallel to the storage plane of the cassette storage racks 32. Each cassettes storage rack 32 has a plurality of chambers 32a, 32a, . . . in which tape cassettes 24, 24, . . . are placed. A bar code label 26 is stuck to each tape cassette 24, at a location, which is outside the cassette storage rack 32 when the tape cassette 24 is put into the rack 32. Near this location, contact terminals 27a, 27a, . . . of the MIC 27 are exposed to the outside. The hand block 37 includes a bar code reader 55 (corresponding to the first reader 8) for reading the bar code information of each tape cassette 24, and also includes a set of MIC terminals 56 (corresponding to the second reader 9) for reading information from the MIC 27. The bar code information and the information stored in the MIC 27 are transmitted to the library controller 42 via the mechanism controller 50. The identification information decision unit and the identification information storage controller are realized by means of software in conjunction with the mechanism controller 50 and the library controller 42 (fig. 9, col. 10, line 56 to col. 11, line 16, Taki et al.).

6. The applicants contend, "The combination of Taki et al. and Kanazawa, as far as the applicants can tell, requires inserting the media into the library database, performing the test, and ejecting the media rather than testing the media independent of insertion into the library database. The combination of Take et al. and Kanazawa does not result in the present invention as recited in claim 1."

The examiner disagrees and would like to point out that "testing the media independent of insertion into the library database" feature is not recited in claim 1, hence the applicants' argument is not applicable.

7. The applicants contend, "As per claim 8, a VCR does not involve logical volumes. Kanazawa describes a test circuit generator, which has nothing to do with inserting logical volumes. The combination of Taki et al. and Kanazawa does not result in the present invention as recited in claim 8."

The examiner disagrees and would like to point out that Kanazawa teaches that the storage media in said physical storage volume tested in step (c) is tested without inserting logical volumes on tested said storage media into a data library (col. 7, lines 43-45, col. 14, lines 5-27, Kanazawa). The examiner would like to point out that the logical volumes on storage media are similar to a control track, an audio track and a video track on the magnetic medium (col. 14, lines 5-27, Kanazawa).

8. The applicants contend, "As per claim 11, 14, the references do not teach or suggest that tested storage media are tested without being inserted into said data library."

The examiner disagrees and would like to mention that Kanazawa teaches that if no recorded signal is present, in the next step 26 the system controller 10 proceeds to test the tape by recording the test signal generated by the test signal generator 4, then reproducing the test signal. The test signal level detector 12 detects the level of the test frequencies and reports the results to the record controller 14, which stores them (fig. 1, col. 7, lines 56-61, Kanazawa).

Claim Objections

9. Claim 13 is objected to because of the following informalities: At the beginning of claim 13, "(original)" should be mentioned. Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1, 2, 5, 6, 7, 8, 14, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taki et al. (US 6,088,182) in view of Kanazawa (US 5,561,530).

As per claims 1, 2, 5, 6, 7, 18 and 19, please see the office action mailed on 12/21/2005 for details.

- As per claim 8, Taki et al. and Kanazawa teach the additional limitations.

Kanazawa teaches that said storage media in said physical storage volume tested in step (c) is tested without inserting logical volumes on tested said storage media into a data library (col. 6, lines 19-25, Kanazawa).

- As per claim 14, Taki et al. and Kanazawa teach the additional limitations.

Taki et al. teach a storage subsystem for storing and administering data in a data library, said storage subsystem comprising: a bulk input rack storing removable storage media and test storage media; a plurality of storage media drive units accessing data in a data library stored on said removable storage media; an accessor selectively moving ones of said removable storage media and said test storage media to a selected one of said one or more drive units; a visual input unit reading media identification information on selected said removable storage media and said test storage media (fig. 7, 8, 9, col. 9, line 66 to col. 10, line 22, col. 10, line 56 to col. 11, line 16, Taki et al.).

Kanazawa teaches storage subsystem capable of testing removable storage media and at least one of said plurality of storage media drive units testing a selected said test storage media (fig. 1, 2, col. 1, lines 6-9, col. 1, lines 51-55, col. 2, lines 39-40, Kanazawa).

13. Claims 3, 4, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taki et al. (US 6,088,182) and Kanazawa (US 5,561,530) as applied to claim 2 above, and further in view of Tadokoro et al. (US 6,539,459 B1). Please see the office action mailed on 12/21/2005 for details.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taki et al. (US 6,088,182) and Kanazawa (US 5,561,530) as applied to claim 1 above, and further in view of Wiley et al. (US 5,579,234). Please see the office action mailed on 12/21/2005 for details.

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15. Claims 11, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taki et al. (US 6,088,182) in view of Kanazawa (US 5,561,530), Wiley et al. (US 5,579,234) and Yadav et al. (US 5,774,725). Please see the office action mailed on 12/21/2005 for details.

16. Claims 15, 16, 17, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taki et al. (US 6,088,182) and Kanazawa (US 5,561,530) as applied to claim 14 above, and further in view of Fisher et al. (US 6,247,096 B1). Please see the office action mailed on 12/21/2005 for details.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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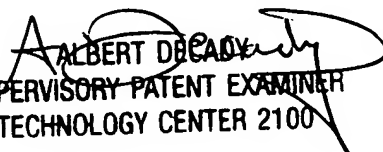
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dipakkumar Gandhi whose telephone number is 571-272-3822. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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